

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**List of Plants for LUTEIN**

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Actinidia chinensis</i>	Fruit	1.8	9.0	-0.057146690675958636	--
<i>Aglaonema commutatum</i>	Seed				Wealth of India.
<i>Allium cepa</i>	Bulb		0.02		Granado, F., Olmedilla, B., Blanco, I., Rojas-Hidalgo, E. 1992. Carotenoid Composition in Raw and Cooked Spanish Vegetables. <i>J. Agr. Food Chem.</i> , 40(11): 2135-2140.
<i>Aloysia citrodora</i>	Plant				--
<i>Angelica archangelica</i>	Leaf				--
<i>Arnica montana</i>	Flower				--
<i>Asparagus officinalis</i>	Plant				--
<i>Averrhoa carambola</i>	Fruit				--
<i>Berberis vulgaris</i>	Plant				--
<i>Bixa orellana</i>	Seed				--
<i>Brassica oleracea</i> var. <i>capitata</i> L.	Leaf				Jim Duke's personal files.
<i>Calendula officinalis</i>	Flower				--
<i>Camellia sinensis</i>	Leaf				--
<i>Capsicum frutescens</i>	Fruit				Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Capsicum annuum</i>	Fruit	0.0	50.0	3.4855553704728424	--
<i>Citrullus lanatus</i>	Fruit	0.14	3.0	-0.575590894746515	--
<i>Citrus reticulata</i>	Fruit	0.2	2.0	-0.6619982620916077	--
<i>Citrus</i> spp	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
<i>Citrus paradisi</i>	Fruit	0.095	0.95	-0.7527259978039551	--
<i>Citrus limon</i>	Fruit	0.12	1.2	-0.731124155967682	--
<i>Citrus sinensis</i>	Fruit	0.0	3.0	-0.575590894746515	--
<i>Citrus sinensis</i>	Pericarp				Jim Duke's personal files.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Cucurbita pepo</i>	Flower				--
<i>Cyphomandra betacea</i>	Fruit				--
<i>Daucus carota</i>	Root				--
<i>Ficus carica</i>	Fruit				--
<i>Fragaria spp</i>	Fruit	0.3	3.0	-0.575590894746515	--
<i>Fucus vesiculosus</i>	Plant				--
<i>Ginkgo biloba</i>	Leaf				Jim Duke's personal files.
<i>Ginkgo biloba</i>	Tissue Culture				Jim Duke's personal files.
<i>Glycine max</i>	Leaf				--
<i>Helianthus annuus</i>	Flower				--
<i>Hordeum vulgare</i>	Sprout Seedling				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Hypericum perforatum</i>	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Lycopersicon esculentum</i>	Fruit				--
<i>Lycopodium selago</i>	Plant				--
<i>Malus domestica</i>	Fruit	0.4	5.0	-0.4027761600563295	--
<i>Medicago sativa</i>	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
<i>Medicago sativa</i>	Flower				--
<i>Medicago sativa</i>	Leaf				--
<i>Momordica charantia</i>	Pericarp				Jim Duke's personal files.
<i>Momordica charantia</i>	Fruit				--
<i>Musa x paradisiaca</i>	Fruit	0.033	0.1	-0.826172260047284	--
<i>Nicotiana tabacum</i>	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Oryza sativa	Plant				--
Panax ginseng	Leaf				--
Persea americana	Fruit	3.2	16.0	0.5477048807396903	--
Petroselinum crispum	Plant				Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Petroselinum crispum	Shoot				--
Phoenix dactylifera	Fruit				Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar.
Pinus sylvestris	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2- 6, Springer-Verlag, Berlin, 1969- 1979.
Pisum sativum	Plant				--
Prunus persica	Fruit	0.14	2.8	-0.5928723682155337	--
Prunus domestica	Fruit	2.4	24.0	1.238963819500432	--
Prunus armeniaca	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Pyrus communis	Fruit	1.0	11.0	0.11566804401422677	--
Rheum rhabarbarum	Pt	1.7	34.0		--
Rhodymenia palmata	Plant				--
Ribes rubrum	Fruit	0.47	2.3	-0.63607605188808	--
Ribes nigrum	Fruit	4.4	22.0	1.0661490848102466	--
Ribes uva-crispa	Fruit	1.7	9.0	-0.057146690675958636	--
Rosa canina	Fruit		9.2	-0.039865217206940466	--
Rubus idaeus	Fruit	0.76	4.0	-0.48918352740142235	--
Solanum tuberosum	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Solanum tuberosum</i>	Tuber		1.0		--
<i>Spinacia oleracea</i>	Leaf		42.0		--
<i>Tagetes patula</i>	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Tagetes erecta</i>	Flower				--
<i>Taraxacum officinale</i>	Flower				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
<i>Triticum aestivum</i>	Plant				--
<i>Tropaeolum majus</i>	Flower				--
<i>Tussilago farfara</i>	Flower				--
<i>Urtica dioica</i>	Seed	10.0	25.0		Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
<i>Vaccinium myrtillus</i>	Tissue Culture				--
<i>Vaccinium myrtillus</i>	Fruit	2.6	26.0	1.4117785541906174	--
<i>Vaccinium macrocarpon</i>	Fruit	0.28	2.0	-0.6619982620916077	--
<i>Viscum album</i>	Leaf				--
<i>Vitis vinifera</i>	Fruit	0.7	7.0	-0.22996142536614406	--
<i>Zea mays</i>	Leaf				--